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Key Findings from 25 Years of IWPR Research

Child Care, Education, and Job Training: How Investing In Quality Programs Improves Outcomes for Children, Girls, and Women

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Recognizing that education is the gateway to opportunity, the Institute for Women's Policy Research (IWPR) has been a significant source of research on education and training, including work on early care and education, girls' experiences in the K-12 system, high quality workforce development opportunities, and postsecondary attainment. Its work has explored the importance of education for improving women's earnings, the importance of access to quality early care and education for mothers' labor force outcomes, methods for improving job quality among early care and education providers, the role of child care in spurring and sustaining economic development, the importance of low-income women's access to post-secondary education as a poverty reduction tool, strategies for increasing the success of student parents in college through providing child care and other supports, and increasing women's representation in higher paying, traditionally male careers such as in Science, Technology, Engineering, and Math (STEM) fields.

Early Care and Education (ECE)

Access to Child Care

IWPR has conducted research on the importance of expanding access to quality early child care and education (ECE) since its founding in 1987. In 1988 testimony before the Subcommittee on Human Resources Committee on Education and Labor, The Economic Realities of Childcare (#1), IWPR founder and President Dr. Heidi Hartmann used economic theory to examine market failures in the child care industry. Dr. Hartmann reported that public subsidies provide five desirable outcomes: 1) improving the operation of child care markets; 2) increasing the quality of child care; 3) reducing the burden of child care costs on families; 4) helping families achieve economic security; 5) and reaping long-term benefits from increased investments in children. This testimony and others provided by IWPR staff members were among those used in the debate on the

Act for Better Child Care (ABC). Following that debate, President George Herbert Walker Bush signed the Child Care and Development Block Grant Act into law, which was the first comprehensive federal child care legislation since Richard Nixon vetoed a major bill in 1971.

In 2004, IWPR prepared a series of reports on the Status of Early Care and Education in the States with support from the Rockefeller Family Fund, as a part of an experiment to assess how information about child care might affect women's propensity to vote. IWPR published reports for Wisconsin (#2), New Mexico (#3), and the United States (#4) that presented data on indicators of child care and preschool access and quality. In partnership with People for the American Way (PFAW), IWPR participated in release events in each of the two states and in a national press conference. PFAW conducted testing by polling citizens in each of the two target states to gauge their interest in voting, both before and after they received information with

IWPR's research on ECE quality and access. The surveys found that receiving the information substantially increased survey participants' interest in voting if a candidate who supported child care expansions would be on the ballot.

Another 2004 report, *Keeping Moms on the Job: The Impacts of Health Insurance and Child Care on Job Retention and Mobility among Low-Income Mothers* (#5), provided a groundbreaking analysis showing the importance of child care subsidies for job retention among low-income working mothers. Supported by the Joyce Foundation, the report has been an important resource for job quality advocates seeking evidence that worker supports make a difference in labor market outcomes.

In 2005, with funding from the John S. and James L. Knight Foundation, IWPR published a promising practice report on improving quality in Family, Friend and Neighbor early care and education settings, entitled *In Our Own Backyards* (#6), which was the first report of its kind, and which provided recommendations on innovative models for engaging home-based providers in community-based child care quality efforts.

Research Technical Assistance on Preschool Expansions

In 2000, with funding from the John D. and Catherine T. MacArthur Foundation, IWPR hosted a strategy session in Washington, D.C. to identify key research needs among the early care and education advocacy community. After a day of considering possible options, the group agreed that the most pressing need was to develop a reliable tool for estimating the costs of preschool expansions at the state and local level. Working with national early care expert Dr. Anne Mitchell of Early Childhood Policy Research, IWPR developed a cost estimate tool that it utilized to inform preschool expansion efforts in a number of states, including California, Illinois, Kansas, and Virginia (#7). The cost estimation model helped to inform leaders around the country who were working to expand state-funded preschool education for 3, 4, and 5-year-olds.

In 2007, IWPR conducted cost estimates for a ten-year early childhood education program expansion in Kansas with a statewide working group. IWPR Vice President and Executive Director Barbara Gault presented estimates to then Governor of Kansas Kathleen Sebelius along with members of the Kansas School Readiness Coalition and ad-

ministrators of existing programs. The Governor expanded early care and education funding in the state by \$14.1 million during the legislative session. IWPR also produced estimates of the cost of expanding pre-K programs for disadvantaged children in the state of Virginia, leading to a proposed \$75 million expansion for pre-K services by then Governor of Virginia, Timothy M. Kaine, that closely mirrored the parameters of the estimates produced by IWPR.

In 2008, IWPR published a national report arising from these efforts, *Meaningful Investments in Pre-K: Estimating the Per-Child Costs of Quality Programs* (#8), with support from the Pew Charitable Trusts. The report provided policymakers, school administrators, and program directors with per-child cost estimates of preschool programs of varying levels of quality. Through literature reviews and a detailed cost analysis of pre-K programs, the authors quantified the costs of quality interventions such as decreases in class size and increases in teacher credentials.

Improving ECE Quality Through Workforce Interventions

IWPR has conducted a number of studies focused on improving the quality of ECE jobs, both to improve working conditions and incomes for the ECE workforce and to improve the quality of education for pre-school age children. Building a Stronger Child Care Workforce: A Review of Studies of the Effectiveness of Public Compensation Initiatives (#9; 2002) reviewed evaluations from seven different programs aimed at improving the salaries of child care workers through tiered compensation initiatives. IWPR found that compensation initiatives can improve early child care workforce education and retention—two key elements of a quality child care program. The report also recommends that programs pursue one or more of the following strategies to ensure a quality child care workforce: increasing starting salaries; establishing minimum education and training requirements for workers; linking professional development activities to bonuses or pay increases; providing access to credits toward a college degree; and sustaining programs through multiple funding streams. The report was supported by the A.L. Mailman Foundation.

In 2006, with funding from the National Education Association, IWPR compiled a report on the evidence that PreK-Grade 3 teacher quality interventions improve outcomes for children (#10). In 2011, IWPR produced a briefing paper,

focused on the Denver area, that compiled evidence that improving access to paid sick days for the community at large would improve school outcomes for children in K-12 settings (#11). In addition, with funding from the Albert Shanker Institute, IWPR is currently conducting research on the employment circumstances of K-12 teachers of varying racial and ethnic backgrounds, as well as by gender.

Economic Development and Child Care

In 2006, IWPR received a sizeable grant from the W.K. Kellogg Foundation to work in partnership with a group of organizations to help improve the early care and education infrastructure as an economic development strategy. Partners included Cornell University, the Smart Start National Technical Assistance Center, and the Alliance for Early Childhood Finance. Activities included a state-based learning community on economic development and child care that shared innovative financing methods, a mini-grants program to seed state and local organizations, and research, outreach, and technical assistance on activities such as measuring the economic impact of early care and education in communities, as well as including child care as a part of state and local regional planning efforts.

Postsecondary Education (PSE) and Job Training

Increasing Low-Income Women's Access

The 1996 welfare reform law includes a number of components that incentivize women to pursue low-wage work instead of pursuing higher education or job training. IWPR published several briefing papers and reports demonstrating that quality education and job training leads to long-term earnings gains that alleviate poverty and improve child outcomes (#12). IWPR published a series of fact sheets and briefing papers summarizing studies on increased earnings among welfare recipients who receive quality postsecondary education and training, in coordination with the Center for Community Change, and with funding from the Annie E. Casey Foundation (#13). This worked helped to inform expansions in access to education and training incorporated in the Balanced Budget Act of 1997.

In 2001, IWPR published the results of a major study en-

titled Working First But Working Poor: The Need for Education & Training Following Welfare Reform (#14). Relying on original IWPR surveys of job training recipients and workforce development professionals conducted in seven states, IWPR established that while women were receiving lower quality training and education experiences than men, case managers underestimated women's interests in nontraditional fields they were qualified to pursue, such as work in computer IT fields. The report recommends interventions to increase women's likelihood of workforce success by improving access to nontraditional jobs, increasing supports at community colleges, extending training times allowable under TANF, and allowing enrollment in programs outside of community colleges for women who had not received a GED or high school diploma. The study was funded by a foundation that wished to remain anonymous, and IWPR worked in partnership with Legal Momentum (formerly NOW Legal Defense and Education Fund) to disseminate the report's findings. The results were also published in two academic journals which assured that the results were widely available to the academic community as well as the advocacy community and policymakers (#15; #16).

In 2002, IWPR Vice President and Executive Director Barbara Gault testified before the House Education and Workforce Committee on how Workforce Investment Act Programs and TANF could be coordinated to provide education and training opportunities to reduce poverty among low-income women (#17). Dr. Gault's testimony highlighted evaluations from promising job training programs shown to increase low-income women's wages, and recommended that any changes to the nation's workforce development system include modifications to Workforce Investment Act programs that increase access to high quality job training and education options.

IWPR's 2006 report, Resilient and Reaching for More: Challenges and Benefits of Higher Education for Welfare Participants and Their Children (#18), used interviews, focus groups, and survey data gathered from current and former student parents who sought postsecondary education while receiving welfare in California to examine the challenges and payoffs of acquiring higher education under the constraints of welfare reform. It finds that while the benefits of education are considerable, student parents experience barriers to access, including lack of knowledge about how to access education due to limitations and re-

quirements imposed on welfare recipients, as well as a lack of support and assistance from caseworkers. Degree holders had higher hourly wages than degree seekers, were more likely to experience better job opportunities, and had greater financial resources and improved personal relationships. Communities also benefited from student parents earning higher education credentials, as most degree holders stayed in and increased their involvement in the community.

Shifting the College Environment to Accommodate Students with Children

In 2010, with substantial support from the Bill & Melinda Gates Foundation, IWPR launched the Student Parent Success Initiative (SPSI), to raise awareness about student parents and increase knowledge-sharing about how to provide student parents with greater access to support services and resources. This new initiative built on previous IWPR research on both early care and education programs and on women's access to postsecondary education. The SPSI project's research found that approximately 25 percent of college students in the United States, or 4 million students, have dependent children, and the proportion is even higher among low-income students. Many colleges and universities are unaware of both the high proportion of their students who are parenting and their need for child care and other supportive services.

The 2011 report, *Improving Child Care Access to Promote Postsecondary Success Among Low-Income Parents* (#19), uses information gathered from a literature review, interviews with campus child care experts, interviews with child care center and program administrators, and analyses of postsecondary education data to assess the demand for and adequacy of existing child care and to examine the characteristics of successful campus child care programs. The report finds that while, in 2008, one in four college students were parents, only five percent of student parents who needed child care supports had access to on-campus child care, and the proportion of campuses with child care centers is declining.

To help campuses expand resources for student parents, IWPR published *Tools for Student Parent Success: Varieties of Campus Child Care* (#20) in 2012. This toolkit, the first in a series, provides an overview of options for uni-

versities and colleges looking to start, improve, or expand child care program offerings for students and faculty.

To release the findings of its research, and to build a community of individuals attuned to the needs of student parents, the SPSI project has hosted webinars on topics such as integrated service delivery at community colleges, student parents and online learning, financing campus child care, federal programs that encourage education among young mothers (including the Pregnancy Assistance Fund, a provision of the Affordable Care Act). and bridges to college for pregnant and parenting teens. It has also distributed a monthly newsletter on research, programs, and policies affecting student parent success. The network of agencies, organizations, colleges, and students involved with the SPSI project has grown from 100 members to over 1,000. Research from the project has been featured in multiple news and media outlets, including The Chronicle of Higher Education, American Prospect, the Christian Science Monitor, and CNN.

Improving Access to Education in STEM Fields

Women in STEM occupations in the United States have higher median annual earnings than women working in other fields, but they continue to be under-represented in these jobs, as well as in many STEM education programs. IWPR research on STEM education has focused on various points along the educational pipeline, including an evaluation of a Girl Scouts of the USA program to engage under-represented minority girls in STEM through informal education, funded by the National Science Foundation (#21). An IWPR report funded by the National Academy of Engineering explored pedagogical methods to increase women's participation in engineering at the undergraduate level (#22).

While significant scholarship has focused on increasing women's access to STEM education at the BA level and higher, little research has explored women's education in STEM fields at the community college level. An IWPR fact sheet, "Gender Segregation in Fields of Study at Community Colleges and Implications for Future Earnings" (#23), demonstrates that women are dramatically underrepresented in a number of fields of study in community colleges, such as in Computer IT, where they make up only 25 percent of graduates. Since community colleges have

higher proportions of women, low-income students, and student parents compared with four-year institutions, they could play a vital role in helping these students gain credentials in STEM fields. In 2012, IWPR published Increasing Opportunities for Low-Income Women and Student Parents in Science, Technology, Engineering, and Math at Community Colleges (#24). The report reviewed research on the factors affecting women's decisions not to choose STEM careers including: lack of female role models, a need for more varied pedagogical approaches, and lack of recruiting and providing STEM programming at younger ages. IWPR analysis finds that women are substantially under-represented in community college STEM programs, and that the share of women in Computer IT programs has actually been declining. The report profiled seven programs at community colleges around the United States that are working to engage women in STEM education. Recommendations in the report included: strengthening STEM programs in community colleges; conducting more research on women, STEM, and community colleges; and strengthening federal policy for STEM education in community colleges.

With support from the National Science Foundation, in 2013 IWPR held a national convening of experts from around the country to establish priorities on improving the representation of women of color in faculty positions in STEM fields in the United States. Key recommendations coming out of the convening include establishing a clearinghouse of information on the status of women of color in STEM faculty positions, as well as a national system of ranking colleges and universities on the representation of women of color among their faculty. A number of participants remarked that improving the representation of women of color in STEM fields is crucial to the nation's efforts to train a diverse and qualified STEM workforce, which is thought to be critical to the nation's future economic development efforts.

The Educational Status of Women and Girls in the States

In 2004, with funding from and in collaboration with the American Association of University Women, IWPR produced a series of reports on The Educational Status of Women in the States, which included reports on women's educational status in California (#25), Texas (#26), Georgia (#27), and Michigan (#28). The reports found that women earn less than men at every educational level, and that women need higher credentials to earn wages that are comparable to those earned by men. The reports point to the fact that although women participate in postsecondary education at higher rates than men, their labor market outcomes continue to be worse than men's, so women require more higher education than men to approach the earnings and benefits enjoyed by men with lesser levels of education.

A number of recent IWPR reports have addressed girls' experiences in schools. IWPR reports on the Status of Women and Girls, such as those prepared for New Haven, Connecticut (#29) and the Washington D.C. metropolitan area (#30), each provide data on girls' standardized test performance in math and reading as compared to boys. In some regions data are available to describe school experiences in more depth. For example, the Status of Girls in Minnesota (#31) reports that while girls spend more time studying than boys, they also spend more time working for pay, performing chores around the house, and caring for siblings, which could affect the time that they have available to devote to school work, extracurricular activities, or even sleep. A recent article, "Improving Outcomes for Marginalized Girls in the Secondary Education and Workforce Development Systems" (#32), discusses how girls' experiences with factors such as sexual harassment and abuse. teen pregnancy, and gender segregation in career preparation can affect girls' educational trajectories. The article makes recommendations for program development, service coordination, and policies that can help to ensure that marginalized girls have strong educational opportunities that can promote their future economic success and well-being.

Conclusion

IWPR's 25 years of research and technical assistance on education, from early education to postsecondary degree attainment, has helped to inform policies at both the state and national level that have improved opportunities for both working parents and their children. Through this line of work, IWPR has been able to draw important connections and links between how early education affects employment and higher educational outcomes, as well as how teacher job quality influences the effectiveness of education and student preparation in the early, secondary and postsecondary educational settings.

References

- #1 Hartmann, Heidi. 1988. The Economic Realities of Childcare. Testimony, IWPR #G703. Washington, DC: Institute for Women's Policy Research.
- #2 Williams, Erica, and Anne W. Mitchell. 2004. The Status of Early Care and Education in Wisconsin. Report, IWPR #R261. Washington, DC: Institute for Women's Policy Research.
- #3 Williams, Erica, and Anne W. Mitchell. 2004. The Status of Early Care and Education in New Mexico. Report, IWPR #R262. Washington, DC: Institute for Women's Policy Research.
- #4 Williams, Erica, and Anne Mitchell. 2004. The Status of Early Care and Education in the States. Report, IWPR #R263. Washington, DC: Institute for Women's Policy Research.
- #5 Lee, Sunhwa. 2007. Keeping Moms on the Job: The Impacts of Health Insurance and Child Care on Job Retention and Mobility among Low-Income Mothers. Report, IWPR #C360 Washington, DC: Institute for Women's Policy Research.
- #6 Hamm, Katie, Barbara Gault, and Avis Jones-Deweever. 2005. In Our Own Backyards: Local and State Strategies to Improve the Ouality of Familv Child Care. Report, IWPR #G717. Washington, DC: Institute for Women's Policy Research.
- #7 Golin, Stacie, Anne Mitchell, and Barbara Gault. 2004. The Price of School Readiness: A Tool for Estimating the Cost of Universal Preschool in the States. Report, IWPR #G713. Washington, DC: The Institute for Women's Policy Research.
- #8 Gault, Barbara, Anne Mitchell, and Erica Williams. 2008. Meaningful Investments in Pre-K: Estimating the Per-Child Costs of Quality Programs. Report, IWPR # G718. Washington, DC: Institute for Women's Policy Research.
- #9 Park-Jadotte, Jennifer, Stacie Golin, and Barbara Gault. 2002. Building a Stronger Child Care Workforce: A Review of Studies of Public Compensation Initiatives. Report, IWPR #G711. Washington, DC: Institute for Women's Policy Research. #10 Williams, Erica, Misha Werschkul, Barbara Gault,

- and Avis Jones-DeWeever. 2006. The Relationship Between Teacher Job Quality and Outcomes for Children: A Review of the Research Literature. Report submitted to the National Education Association.
- #11 Towne, Sarah, Rhiana Gunn-Wright, Kevin Miller, and Barbara Gault. 2011. "Denver Paid Sick Days Would Promote Children's School Success." Briefing Paper, IWPR #B300. Washington DC: Institute for Women's Policy Research.
- #12 Gault, Barbara, ed. 1998. "Education and Training under Welfare Reform." Welfare Reform Newsletter, Vol. 1, Issue 11-12. Washington, DC: Institute for Women's Policy Research.
- #13 — . 1998. "Welfare Reform and Postsecondary Education: Research and Policy Update." Welfare Reform Newsletter, Vol. 2, Issue 1. Washington, DC: Institute for Women's Policy Research.
- #14 Negrey, Cynthia, Stacie Golin, Sunhwa Lee, Holly Mead, and Barbara Gault. 2001. Working First but Working Poor: the Need for Education & Training Following Welfare Reform. Report, IWPR #D442. Washington, DC: Institute for Women's Policy Research.
- #15 Negrey, Cynthia, Annisah Um'rani, Stacie Golin, and Barbara Gault. 2000. "Job Training Under Welfare Reform: Opportunities for and Obstacles to Economic Self-Sufficiency Among Low-Income Women," Georgetown Journal on Poverty Law & Policy, Volume 7, No. 2.
- #16 Negrey, Cynthia, Stacie Golin, Sunhwa Lee, and Barbara Gault. 2003. "Job Training For Women Leaving Welfare: Assessing Interest in Nontraditional Employment." Research in the Sociology of Work, Volume 12.
- #17 Gault, Barbara, 2002. Utilizing Workforce Investment Act Programs and TANF to Provide
- Education and Training Opportunities to Reduce Poverty among Low Income Women. Testimony before the House Education and Workforce Committee, Subcommittee on 21st Century Competitiveness." Testimony, IWPR #D448. Washington, DC: Institute for Women's Policy Research.
- #18 Jones-DeWeever, Avis, and Barbara Gault. 2006. Resilient and Reaching for More: The Challenges and Benefits of College for Welfare Participants and their Children. Report, IWPR #D466. Washington, DC: Institute for Women's Policy Research.

#19 Miller, Kevin, and Barbara Gault. 2011. Improving Child Care Access to Promote Post-Secondary Success among Low-Income Parents. Report, IWPR #C378. Washington, DC: Institute for Women's Policy Research. #20 Boressoff, Todd. 2012. Tools for Student Parent Success: Varieties of Campus Child Care. Report, IWPR #C392. Washington, DC: Institute for Women's Policy Research. #21 Osborne, Lynette, and Barbara Gault. 2010. Evaluation of Girls Understand, Imagine, and Dream Engineering (GUIDE) Program. Report submitted to the Girl Scouts of the USA. #22 Osborne, Lynette, Kevin Miller, and Robin Farabee-Siers. 2008. Pedagogical Methods for Improving Women's Participation and Success in Engineering Education. Report, IWPR #C367. Washington DC: Institute for Women's Policy Research. #23 Moughari, Layla, Rhiana Gunn-Wright, and Barbara Gault. 2012. "Gender Segregation in Fields of Study at Community Colleges and Implications for Future Earnings." Fact Sheet, IWPR #C394. Washington, DC: Institute for Women's Policy Research. #24 Costello, Cynthia. 2012. Increasing Opportunities for Low-Income Women and Student Parents in Science, Technology, Engineering, and Math at Community Colleges. Report, IWPR #C388 Washington, DC: Institute for Women's Policy Research.

Heidi Hartmann. 2005. Women's Education and Earnings in California. Washington, DC: American Association of University Women Educational Foundation. #26 — — . 2005. Women's Education and Earnings in Texas. Washington, DC: American Association of University Women Educational Foundation. #27 — — . 2005. Women's Education and Earnings in Georgia. Washington, DC: American Association of University Women Educational Foundation. #28 — — ... 2005. Women's Education and Earnings in Michigan. Washington, DC: American Association of University Women Educational Foundation. #29 Hess, Cynthia, Rhiana Gunn-Wright, and Claudia Williams, 2012. The Status of Women and Girls in New Haven, Connecticut. Report, IWPR #R355. Washington, DC: Institute for Women's Policy Research. #30 Institute for Women's Policy Research. 2010. 2010 Portrait of Women and Girls in the D.C. Metropolitan Area. Report, IWPR #R376. Washington, DC: The Washington Area Women's Foundation. #31 Williams, Erica, Casey Clevenger, Lynette Osborne. March 2008. Status of Girls in Minnesota. Report, IWPR #R342. Washington DC: Institute for Women's Policy Research. #32 Gunn-Wright, Rhiana, and Barbara Gault. 2013. "Im-

proving Outcomes for Marginalized Girls in the Secondary

Education and Workforce Development Systems." George-

town Journal of Poverty Law and Policy. Winter, 2013.

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#25 Caiazza, Amy, Mischa Werschkul, Barbara Gault, and